

University Research Update (4th edition)

Welcome to the university's research newsletter which has been developed to inform you about research in the university, relevant information, news and support. You have received this newsletter as you are on the university's mailing list as being research active / interested.



We know how challenging the last few months has been for many research students and staff, not just within UHI, but across Scotland and the world. COVID-19 has led to many researchers not having access to laboratories, not been able to travel to undertake fieldwork, to schedules disrupted and to work streams being rearranged. It has been a difficult time, and I want firstly to pay tribute to the resilience that I have seen from our research community across UHI. Looking to the future we know that campuses and research facilities are beginning

to open up, but we know too that there remains much uncertainty about a second wave of COVID-19.

A great deal of work has gone on across the sector to ensure that the Scottish Government understand the financial impact of COVID-19 on the research community, and in April and May I was very much involved in this work. On 12th June 2020, the Scottish Funding Council announced that an additional sum of £75M has been made available to Scottish universities and HEIs to mitigate, in part, the impact of COVID19 on the research base in universities and HEIs across Scotland. The funds have been distributed using pre-existing formula relating to REF2014 performance. The University of the Highlands and Islands will receive £918,965 of additional funding and this is clearly a helpful one-off contribution to support mitigating COVID-19 impacts.

The announcement comes with clear and robust conditions as to which activities this funding must be allocated to. In sum these are:

1. To mitigate impacts of the COVID-19 pandemic on research and support responses to it by research. It must not be used for wider or pre-existing financial remediation;
2. To protect (where possible) jobs at all levels in research to protect Scotland's national capability, including responding to the impact of COVID-19 on the work and careers of postdoctoral researchers on fixed-term contracts;
3. To demonstrate a collaborative approach, nationally and regionally, wherever that makes research more effective;
4. To demonstrable research emphasis in Academic Year 2020-21 on the fight against COVID-19 and on the social and cultural impacts of the pandemic;
5. Recognising that university research translation is critical for Scotland's post-COVID-19 low-carbon economy, universities must give proper focus to their economic and social role;

6. To assist PhD students whose studies are affected by COVID-19, and should do so in a consistent manner across the sector (to the extent possible);
7. To ensure that support for staff and PhD students is done in such a way as to reduce inequality of opportunity across protected characteristics.

Universities are required to report in October 2020, January 2021 and April 2021 as to how the funds have been utilised and how the conditions of grant have been met.

It has been agreed within UHI that we will distribute 80% of these funds to academic areas using the REF 2014 formula to be spent on activity aligned with the criteria, whilst 20% of the funds will be retained for distribution to any academic partner or research area in executive office in relation to more strategic initiatives relating primarily to criteria 3, 4 and 5. 20% of the funding amounts to a sum of £183,793. In this sense 100% of the funds will be distributed directly to research areas across UHI. Detailed information relating to the utilisation of the 80% of funds, including support for PhD students affected by COVID-19 will be made available across the partnership shortly and a 'call' for bids for the 20% of the funding will also be progressed over the next few weeks.

Professor Neil Simco

An t-Àrd-Ollamh Niall Simco

Vice-Principal Research and Impact

Iar-Phrionnsapal Rannsachaidh agus Buaidh

VACANCIES

Research Assistant (Medical Nanotechnology)

The above vacancy to work within the Institute of Health Research and Innovation will be based at the Centre for Health Science. The deadline for applications is Fri 28 August. More information.

Development Manager

Applications are invited for a Development Manager to join the Division of Rural Health and Wellbeing. The deadline for applications is Sun 16 August. More information.

Iris melanomas caused by ultra-violet induced DNA damage



Uveal melanomas are a rare subtype of melanoma that form in the eye. Despite surgical or radiation treatment, half of patients progress to metastatic disease for which there are limited therapeutic options. These melanomas can be further subdivided by location in the eye.

The recent study published in Nature Communications by Dr Antonia Pritchard (Division of Biomedical Science) with her colleagues in

Brisbane, Australia, has examined the genetic changes present in tumours, to identify clues that might make them vulnerable to treatment. They found that tumours occurring in the iris (coloured part of the eye) were caused by ultra-violet radiation (typically from the sun) induced DNA damage and that they have a higher number of mutations compared to the other uveal melanoma locations. This is a marker for vulnerability to immunotherapy; therefore this study revealed there is a potential treatment for the iris subset of uveal melanomas. (Manuscript link: <https://www.nature.com/articles/s41467-020-16276-8>)

A one-stop-shop to improve communication across UHI for people with research and teaching interests in digital technologies



A one-stop-shop to improve communication across UHI for people with research and teaching interests in digital technologies is being developed by the Marine, Environmental Science and Engineering (MESE) cluster. This will be both for those with specific expertise in the technologies and for those interested in applying these tools for their own cutting edge applications or teaching. The Hub will help share information and improve research linkages with computing science (CS), skilled scientists and prospective users. It may also form the nucleus for grant applications and better marketing. To begin with MESE wants to find out and share who is already active, or wants to be more active, across the Partnership in teaching, research or KE in the field(s). The scope is currently broad and inclusive and they want to identify, bring together and connect the expertise and ambitions already within UHI.

What you have to do? Simply send Rachel Culver Rachel.Culver@sams.ac.uk an email.



***Breaking News ***

The staff census date for all institutions for REF2021 is tomorrow, 31st July 2020. At UHI, we will be submitting 141 (headcount) and 119.44 (full-time equivalent) researchers organised across seven Units of Assessment.

NHS research restart process



Undernoted is an update on the above from Frances Hines, Research, Development & Innovation Manager, NHS Highland

NHS Highland, along with all other NHS Health Boards in Scotland, is currently following the UK wide NIHR driven and CSO supported Research Restart process. This consists of reviewing ALL research studies currently suspended or proposed to start, carrying out Risk Assessments on them (based on a three component process - CSO/NIHR Priority Status, Risk Assessment Checklist (Sponsor / NHS Review) which considers all aspects of the research, and Working Risks (within the NHS) for patients and staff). If a study is assessed as Green we send out a letter to say the research can start, if Amber then there are some minor issues to resolve, and if Red then rather more issues - these latter two form the basis of discussions between sponsor and NHS RDI.

The priorities we have been given to follow are:

- Covid 19 Studies take priority over everything else
- Then studies that are urgent for patients (cancer trials and some other drug studies)
- Then everything else.

We are steadily progressing through the process, and are ahead of some Health Boards, but are closely following the Strategic and Operational Research Restart Groups established by the CSO. We have to respond to their weekly meetings and report our progress through the national database. We plan to have the NHS Highland Clinical Research Facility in the Centre for Health Science open for patients in a couple of week's time, but we are being extremely careful about social distancing, PPE use, and deep cleaning to ensure patients (who are often quite ill) are protected whilst still be able to access the benefits of the trials they are participating in.

The Scottish Government has this week issued a statement about research in the NHS in Scotland, and indicated progress about the restart of research, as well as discussing vaccine trials.

If you require any more information or support regarding this process then please contact Frances Hines or Anna McIver

Health Research at the university: helping to fight the global COVID-19 pandemic



COVID-19 represents an unprecedented global challenge and cutting-edge research is at the forefront of the battle against the virus. Researchers in the Institute of Health Research and Innovation have been active throughout lockdown in helping to fight the disease and its long-term consequences: a total of 20 projects are active or are the subject of current funding applications. The breadth of the projects underway reflects our diverse research interests from deep investigation into the molecular processes involved in determining disease severity and developing new, anti-viral masks and gloves through to evaluating the resilience of frontline NHS staff, measuring adherence to Government guidelines and using mathematical modelling to assess the factors involved in the spread of the disease. Funding to deliver these projects has been drawn from existing funding streams, including Highlands & Islands Enterprise, the Inverness and Highland City-Region Deal and the Eastern Corridor Medical Engineering (ECME) Cross-Border Interreg Programme in collaboration with researchers in Northern Ireland and the Republic of Ireland. However, our researchers have also been successful in attracting funding from the Chief Scientist Office to support projects covering the health psychology and social sciences aspects of the pandemic. In addition, there are a number of projects under submission to Innovate UK and the Health Foundation.

Below is a selection of COVID-19 research project outlines involving researchers at the university:

CHARIS: Covid Health and Adherence Research in Scotland: Protecting population general & mental health during the coronavirus pandemic: A representative national weekly survey to understand changes. This study involves surveys conducted with 500 individuals from across Scotland to monitor understanding of and adherence to Government guidelines and regulations relating to COVID-19. The results from the first 4 weeks have already been uploaded onto the study website and the study will continue until October 2020. Prof Gill Hubbard is the UHI lead for this project, which is in collaboration with the University of Aberdeen and is funded by the Chief Scientist Office.

Primary care research priorities after COVID-19: A collaborative programme across 9 Scottish universities to inform a consensus for research priorities after the pandemic. The UHI component of the project is led by Prof Gill Hubbard.

Using participatory digital platforms to enhance resilience and mental health of Scottish frontline health and care staff during COVID-19: This project is led by researchers at the University of the Highlands and Islands (Dr Hannes de Kock, Dr Sarah-Anne Munoz and Dr Mark Grindle) and is funded by the Chief Scientist Office.

Health literacy and exercise in cardiac patients during Covid-19: a project that evolved from an existing PhD project undertaken by Ronie Walters as part of the ECME Cross-Border Programme under the supervision of Prof Trish Gorely and Prof Steve Leslie in collaboration with NHS Highland.

COVID-19, diabetes and cardiovascular disease: an ECME-funded PhD project undertaken by Jacob Roberts as part of the ECME programme under the supervision of Prof Megson, Dr Wei, Dr Pritchard and Dr Treweeke at UHI.

COVID-19 in Scotland: a mathematical modelling approach to help understand the determining factors for case and mortality rates in a diverse population: a project undertaken by Prof Megson and Dr Husi in collaboration with NHS Highland Department of Public Health. It is anticipated that the output will help inform national public health policy and will translate to other countries affected by the pandemic.

Transforming clinical pathways using a digital app for chronic obstructive pulmonary disorder: a project supported by the Inverness and Highland City-Region Deal in collaboration with NHS Highland to assess the impact of an existing app to improve the respiratory clinical pathways.

TEC Pathfinder: can the Highland respiratory pathway be transformed? A Scottish Government funded project to assess methods of improving the respiratory clinical pathway. Led by Dr Sarah-Anne Munoz and Dr Mark Grindle.

The Humanities and Arts Research cluster (HARC)



The Humanities and Arts Research Cluster (HARC) brings together researchers from diverse disciplines within the humanities and arts. The cluster is a collaboration of staff engaged with scholarly and creative engagement with the past and present, rooted in an understanding of the regional heritage and context of the Highlands and Islands <https://www.uhi.ac.uk/en/research-enterprise/res-themes/humanities-and-arts/>

HARC activities can be broadly said to cover:

- Archaeology
- History
- Gaelic
- Literature
- Creative Industries
- Music
- Visual Art
- Textiles

To join HARC, please contact their administrator Pàdruig Moireach.

Find out more about the four clusters [here](#).

The Society, Identity, Knowledge and Landscape (SILK) cluster



There is also a Research Cluster which brings together researchers from diverse disciplines under the broad remit of The Society, Identity, Knowledge and Landscape (SILK). Here, there is an emphasis on remote and rural communities; the distinctive cultural and natural landscapes of the Highlands and Islands of Scotland and the peoples of this region; in the past, the present and into the future, and in placing the Scottish context in a global perspective <https://www.uhi.ac.uk/en/research-enterprise/res-themes/silk/>

Key research themes are:

- Cultural and natural landscapes/ecosystems
- Identity and heritage
- Sustaining Communities
- Pedagogy

HARC and SILK continue to work well together and are seeking to establish closer links, in support of spreading research throughout UHI. They are pursuing increased collaboration and development of the interdisciplinary linkages across partners while fostering a culture of scholarship and research. For both HARC and SILK Clusters, future plans have of course been impacted by current events; however, they continue to try and develop the reach and range of activities of the clusters as much as they can.

Recent activities and developments include plans to make a June postgraduate conference a regular fixture.

A HARC/SILK organised Webex seminar was held in May on the topic of 'Having an impact on policy: a practical guide' led by Nick Bibby, Director of the Scottish Government's Scottish Policy & Research Exchange.

Following the success of "Ruination & Decay" (HARC's 2019 interdisciplinary research theme) this year the HARC & SILK research clusters have invited papers from disciplines across the Arts, Humanities & Social Sciences engaging with the 2020 conference research theme - The Edge, to be held Wednesday 20th – Thursday 21st January 2021 (at Inverness College UHI and/or virtually).

Further details on the planned conference can be found here: <https://www.uhi.ac.uk/en/research-enterprise/res-themes/interdisciplinary-research-programmes/the-edge-call-for-contributions/>

In addition, a series of videoconferenced monthly seminars on this broad theme is underway, each one attracting 60 to 100 attendees on average. Details on speakers and topics are available here:

<https://www.uhi.ac.uk/en/research-enterprise/res-themes/interdisciplinary-research-programmes/the-edge-call-for-contributions/seminar-series/>

A series of blog posts inspired by the concept of The Edge is online at <https://idruhi.wordpress.com/> and you can keep up to date with the latest developments by following us on Twitter at <https://idruhi.wordpress.com/blog-2/>

Blog submissions on any topic related to the theme of “The Edge” are being accepted. If you would like to contribute an article, please email joanna.rodgers@uhi.ac.uk

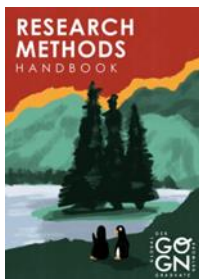
The cluster has been successful in having a submission accepted for ‘Being Human’, the UK’s national festival of the humanities held in November: <https://beinghumanfestival.org/us/>

Researchers from the University of the Highlands and Islands Language Sciences Institute and Soillse, a multi-institutional research collaboration, launched a new book on Thursday 2 July 2020. ‘The Gaelic Crisis in the Vernacular Community: A comprehensive sociolinguistic survey of Scottish Gaelic’ is the most comprehensive social survey on the state of Gaelic communities ever conducted. The book presents new sociolinguistic research about Gaelic communities in the Western Isles, in Staffin in the Isle of Skye and in the Isle of Tiree. The authors urge a radical new approach to vernacular Gaelic revitalisation and propose a new agenda and strategy for Gaelic revitalisation in the islands. <https://www.uhi.ac.uk/en/media/news/new-research-sets-out-radical-new-approach-in-gaelic-policy-to-safeguard-the-future-wellbeing-of-the-language-in-the-islands-.html>

To join SILK, please contact their administrator Pàdruig Moireach.

Find out more about the four clusters [here](#).

A useful free handbook on research methods



A useful, free handbook on research methods - http://gogn.net/gogn_outputs/research-methods-handbook/

Professor Stefan Brink of the Institute of Northern Studies recognised for his work



Congratulations to Professor Stefan Brink (pictured) who has been presented with a Festschrift written in his honour. More information [here](#).

HISA awards to research staff



Best Research or Dissertation Supervisor

Award winner - Antonia Pritchard

Highly commended - David Green, Helena Reinardy, Leah Macaden

Above and Beyond – staff

Highly commended - Marie Cameron

The Plastic Shift Podcast



Huiyi Zhang and Sabolv Pap from the Environmental Research Institute at North Highland College UHI have contributed to a podcast. They are speaking about the work to explore the possibility of using recycled plastics for wastewater treatment.

Access the podcast [here](#).

Graduate School resources

The [Graduate School's SharePoint site](#) is available for all staff and supervisors looking for more information about the postgraduate research provision.

The Code of Practice for Postgraduate Research Degrees and the Brightspace Postgraduate Research area remain the go-to places for student procedural guidance and forms - the aim of this new site is to provide staff with complementary information, templates and checklists to assist with, e.g. candidate interviews and new student local inductions. The Postgraduate Research page on [Brightspace](#) has been updated to include a new page entitled 'Covid-19 (coronavirus): Information for students and supervisors' which contains Covid-related info and FAQs.

Funding opportunities

Funding opportunities can be accessed [here](#).

Haplo Ethics Monitor for online applications for ethical approval

The development of a new online application for ethical approval, which will be provided by [Haplo](#) through their ethics monitor system, is almost complete. Thanks to all of you who have assisted with testing. The new application will be launched week commencing 17th August and will be available through the university's [research ethics website](#). The UHI research ethics framework will be updated to reflect the new process and will also be available through the university's research ethics website.

It is essential that any PG students and staff who intend to submit an application for ethical approval complete the Ethics Reflection and Practice module before completing their application.

It is essential that any line managers / supervisors / research directors who have responsibility for signing off applications for ethical approval complete the Ethics Reflection and Practice module.

For access to the Ethics Reflection and Practice module, which is available through [Brightspace](#), please contact Fiona Leiper.

Research publications

You can browse all research outputs published during 2020 on the university's research database.

Below are a (fairly) random selection of recent publications to demonstrate the breadth of research happening across the university:

Accumulation of ambient phosphate into the periplasm of marine bacteria is proton motive force dependent University author: Zubkov, M.

A citizen science study of short physical activity breaks at school: improvements in cognition and wellbeing with self-paced activity University author: Gorely, T.

A critical social perspective on deep sea mining: Lessons from the emergent industry in Japan University author: Mabon, L.

Addressing issues of geography and mobility in the provision of Higher Education Careers Education and Guidance University author: Alexander, R.

A global assessment of the vulnerability of shellfish aquaculture to climate change and ocean acidification University authors: Last, K.S., Wilding, T.

Congratulations to all researchers who have had their work published.

The university's research web pages

Access the university's support pages for research staff [here](#) to access a host of researcher resources, policy information and news.
